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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,493	01/18/2005	Heikki Kaarakka	3397-138PUS	2004
7590 05/11/2007				
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		EXAMINER		
		HUG, ERIC J		
		ART UNIT		PAPER NUMBER
		1731		
		MAIL DATE		DELIVERY MODE
		05/11/2007		PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/521,493

Applicant(s)

KAARAKKA ET AL.

Examiner

Eric Hug

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 11, which depends on claim 5, is objected to because it recites the exact features of claim 5:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaarakka et al (WO 01/27389).

Kaarakka discloses calendaring arrangements comprising at least two nips formed by roll pairs. Figure 4 shows the arrangement given by independent claim 1. The distance between the center axes of top calender rolls 11 and 13 is greater than the center axes of bottom calender rolls 12 and 14. The roll pairs are stairwise offset at different height levels, with roll pair 11, 12 being higher. The arrangement is a staggered V-shaped configuration which allows for changing of rolls. See page 8, line 21 to page 9, line 12.

Regarding claim 2, each nip is formed by a hard roll and a soft roll, wherein the hard roll is heatable (see page 9, lines 9-12; claim 2).

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Regarding claims 3 and 6, page 8, lines 27-31 disclose that rolls 11, 12 and 13, 14 of the calenders are arranged in any laterally displaced position so that the longitudinal axes of the stacked rolls are not located in the same vertical plane. Although Figure 4 does not show one pair being entirely situated above the other, this particular arrangement is clearly within the scope of Kaarakka.

Regarding claims 4 and 7, this arrangement is exactly depicted in Figure 4, that is with the lower roll of the upper roll pair being at least partially below a top level of the upper roll of the lower roll pair.

Regarding claims 5 and 8-13, steam boxes may be placed between calender nips (see page 9, lines 22-28).

Regarding claims 14-17, page 16, lines 11-14 disclose an inclination angle of 15° to the vertical plane.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Conrad (US 6,705,216) discloses calender roll pairs tilted at 30-60° to the vertical.

Svenka (US 6,688,218) discloses vertically staggered calender stacks. The stacks may be vertical, horizontal, or angled.

Fromm (US 5,501,145) discloses a four-roll calender comprising stacked and inclined roll pairs.

Maurer et al (US 4,670,102) disclose a tandem calender comprising pivoting roll pairs.

Ahrweiler et al (US 4,534,829) disclose successive calender roller pairs. The pairs can be vertically arranged (column 5, lines 13-18).

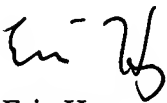
Kankaanpaa (US 4,332,191) discloses vertically staggered calender stacks in which one stack is situated entirely above the other. The stacks may be inclined to the vertical plane.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is 571 272-1192. The examiner can normally be reached on Monday through Friday, 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Eric Hug

Primary Examiner